

# REPORT

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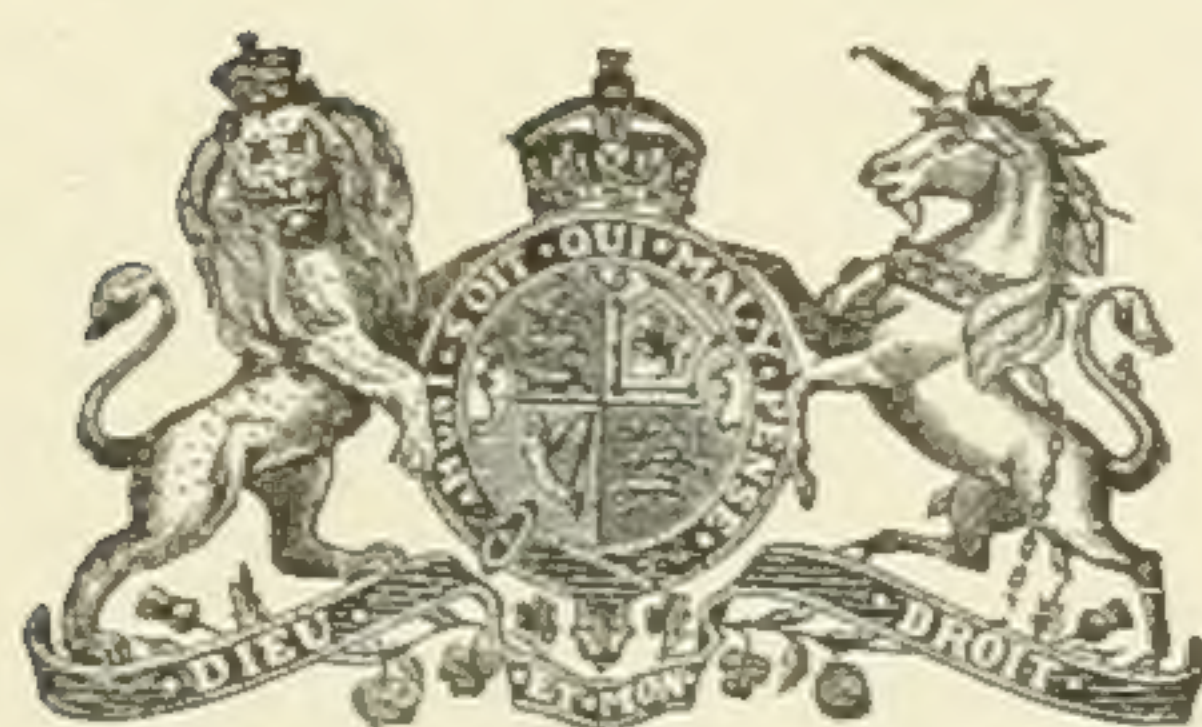
GENERAL SIR JOHN FRENCH, G.C.B., G.C.V.O., K.C.M.G.

INSPECTOR GENERAL OF THE IMPERIAL FORCES

UPON

HIS INSPECTION OF THE CANADIAN MILITARY FORCES

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OTTAWA

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## REPORT

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GENERAL SIR JOHN FRENCH, G.C.B., G.C.V.O., K.C.M.G.

INSPECTOR GENERAL OF THE IMPERIAL FORCES.

UPON

HIS INSPECTION OF THE CANADIAN MILITARY FORCES.

OTTAWA, July 5, 1910.

To the Hon. Sir FREDERICK BORDEN, K.C.M.G., &c.,  
Minister of Militia and Defence,  
Ottawa.

SIR,—I have the honour to report that, in accordance with instructions received from the Imperial Army Council, I embarked for Canada on May 13, and landed at Quebec on the morning of Friday, May 20.

I reported my arrival to you by telegram, dated May 20. I was met on board the R.M.S. *Victorian* by Major General Sir Percy Lake, Inspector General of the Canadian Militia, who conveyed verbally to me your wishes and instructions.

Sir Percy handed me an itinerary, comprising a series of inspections of Canadian permanent troops and militia, which you desired me to carry out. The tour was to cover both eastern and western Canada, and was also arranged to include visits to the fortress at Halifax, the Royal Military College, and various other establishments in connection with the maintenance and efficiency of the Canadian Militia.

A copy of this itinerary is contained in Appendix 'A' of this report.

From the instructions conveyed to me I have conceived that it is your desire that I should report to you fully upon the state and condition of the Canadian Militia, with respect to its readiness either to maintain internal order within the country, to protect its frontiers against attack, or to furnish contingents to succour other parts of the Empire, in the event of the Dominion Government seeing fit to follow on the precedent set by them in the late war in South Africa. Of these, the most important and necessary rôle which the Militia have to fulfil is to defend Canada against attack by land. A force which is in a sufficiently satisfactory condition of organization, training and efficiency to render the frontier reasonably secure, will also be in the best position either to furnish Imperial contingents or to keep internal order.

In this connection I would particularly draw attention to paragraph 15, part II., of the memorandum by the Chief of the Imperial General Staff, 'Proposals for so organizing the Military Forces of the Empire as to ensure their effective co-operation in the event of war,' and Appendix 'B' of the same memorandum, in which Canada



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assents to the principles therein enunciated. As regards the first proposal of the above mentioned paragraph 15, it would seem that the defence of Canada against external attack would naturally constitute 'the substantial functions' in a general scheme of defence to be assigned to each part of the Empire.

Throughout this report, therefore, ability to defend the land frontiers of Canada has been the standard by which I have formed my judgment upon the condition of its militia.

As a basis for the comment and recommendations contained in this report I have drawn up a confidential appreciation of the strategic, geographical, topographical and other conditions as they appear to me to bear upon the problem of frontier defence.

A précis of this confidential document is embodied in Appendix 'B' of this report.

As the military organization is centered in eastern Canada, I deal chiefly with that part of the Dominion, but I have divided my report as follows:—

Part I.—Eastern Canada.

Part II.—Western Canada.

Part III.—Summary.



**PART I.—EASTERN CANADA.**

I am expressing my views under the following headings:—

- (A)—Organization.
- (B)—Mobilization.
- (C)—Peace training.
- (D)—Artillery practice, musketry and ranges.
- (E)—Camping grounds and drill halls.
- (F)—Command and staff.
- (G)—Royal Military College.
- (H)—Regimental officers.
- (I)—Non-commissioned officers and men.
- (J)—Horses.
- (K)—Armament and ammunition.
- (L)—Administrative services.
- (M)—Fortresses and armed posts.
- (N)—Schools of instruction and manufacturing establishments.

**(A)—ORGANIZATION.**

A sound system of organization is the corner stone of all military efficiency.

Unless this is based upon a correct appreciation of the characteristics of the country and the requirements of modern war, waste of strength and resources will certainly result, and the people of the Dominion will not get the best value for their money.

Success in war depends to-day more than ever upon the harmonious working together of the different arms of the service, cavalry, artillery, engineers and infantry, and the mutual support they can render to one another.

This can only be secured if each possesses a close and intimate knowledge of the other, and such advantage can only be gained if the peace organization of troops is assimilated to that which is required for war.

For these reasons, I am strongly of opinion that the establishment of a sound organization is the first and foremost requisite to render any army efficient for war, and that no amount of superior physique, armament or individual excellence in either commanders, staff, or bodies of troops will compensate for a want of it.

I am well aware of the many drawbacks which have hitherto hindered the Canadian Militia, but I feel myself obliged to state plainly that, after a careful study of the problem, I am persuaded that their existing system of organization does not fulfil the above requirements, for the following reasons:—

(a) The proportion between the various arms of the service is not correctly adjusted.

For example, the infantry and the heavy artillery are somewhat in excess of actual requirements, whilst the field artillery is at least 50 per cent below the necessary proportion. There is only one battery of field howitzers and the engineers and supply services are much too weak.

The same remark applies to the distribution of troops; instead of each county, province or area furnishing something like its due quota of the various arms, it appears that one part of the country altogether favours mounted troops, another infantry, another artillery, and so on.



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I fully realize that great difficulties exist, but surely these ought not to be insurmountable when it is a question of the safety of the Dominion.

In point of actual numbers, I believe that those contemplated under the present war establishments are sufficient and suitable, if they were allotted in a proper proportion to the various arms of the service, and on the basis of a sound system of organization.

I may mention here that a comparison of the effective strengths as they exist at present with the peace training strengths as laid down shows a considerable shortage in numbers, and I wish to guard against misunderstanding by saying that, in expressing an opinion as to the adequacies of actual numbers, I consider it absolutely essential that these peace training strengths should be maintained, and that sufficient provision should be made to ensure the numbers required on mobilization being always forthcoming.

(b) I am aware that, under existing arrangements, certain war divisions are arranged to be formed on mobilization.

According to these plans, troops which have never served together as an organized body in peace are to be suddenly concentrated in an organization to which they are totally unaccustomed and placed under commanders and staff who will have had no sufficient practice in handling such a unit.

The annual camp trainings are only a large collection of troops without any organization in formations of all arms.

The various arms do not, apparently, work, to a sufficient extent, in conjunction with one another, and hence neither commanders nor staff officers have any practice in the handling of these war divisions with which, within a few days of the outbreak of war, they may have to encounter trained troops in a thickly wooded country which is strange to them.

I cannot lay too much stress on the necessity for cultivating the utmost spirit of mutual understanding amongst all ranks of the troops which make up a war division, and this can only be effected by assimilating peace organizations to those employed in the field.

The Militia of Canada is composed of splendid material, and, according to my observation, is imbued with a fine spirit and energy, and a desire to become efficient, and it seems somewhat illogical to hamper their patriotic and loyal endeavours by failing to organize them to the best advantage. As an instance of how lack of organization permeates throughout the force, and leads to extravagance and loss of power, I might mention that at two of my inspections I saw what were called 'double battalion' regiments on parade. The whole numerical strength of such regiments was not equal to some of the single battalions, and yet each of the two battalions of which they were composed had the same staff and complement of officers and non-commissioned officers as is laid down for a single regiment.

The question of command and staff is of such overwhelming importance in all modern military organizations that I think it best to deal with it, under a separate heading, but I may mention here that the state of affairs existing at the present moment as shown above would render a quick mobilization and prompt action, which is so vital an element in the frontier defence of Canada, altogether impossible, and would effectually paralyze and frustrate any effective preliminary operation of war.

The war organization which I recommend for the Dominion forces is drawn up in Appendix 'C' of this report. I am of opinion that it should be gradually adopted throughout the militia, and that the peace establishments should be assimilated to it.

#### (B)—MOBILIZATION.

If efficiency and readiness for war is to be ensured a complete and thoroughly worked out system of mobilization must go hand in hand with a sound peace organization.



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In order to render the present system by which units are raised from a peace to a war establishment effective, I am of opinion that a closer supervision must be maintained over the 'Service Rolls' kept by unit commanders, and such a system cannot be considered reliable unless a 'test' is applied periodically by means of a trial peace mobilization, which need not necessarily involve a large number of units at any one time.

Arms, clothing and equipment should be maintained in mobilization stores at regimental headquarters. I understand this is being gradually carried out, but I would strongly urge the necessity of accelerating to the utmost this most important service, without which no speedy mobilization can possibly take place.

Any effective scheme of defence must lay down points of concentration for the various units, in accordance with a well thought out and determined plan of campaign.

'Mobilization Time Tables' and 'Railway Time Tables' do not appear to exist at present, and the transport of troops to their several destinations would, in the absence of such arrangements, lead to nothing but chaos and confusion.

I would strongly urge the establishment of a Railway War Council over which the Chief of the General Staff should preside, and which should include amongst its members the managers or representatives of the principal railway companies in Canada.

The following subjects must be taken in hand and settled as quickly as possible by the Mobilization Department before real war preparation can be effective. They do not appear to have received due attention up to the present:—

- (1) War organization of transport, supply, ordnance and medical services.
- (2) Organization of lines of communication.
- (3) Arrangements for the training of drafts and reinforcements.
- (4) Supply and training of remounts.
- (5) Inspection of mobilization stores.

For a country situated as is the Dominion, it is clear that, in order to give it time to develop its latent resources for defence, the existing organized troops should be ready to take the field at the earliest possible moment after the emergency has arisen. In other words, the process of passing them from a peace to a war footing—their mobilization—should be as rapid as possible.

It is equally evident that the work of completing the arrangements for speedy mobilization, of providing, or ensuring the provision of transport, equipment, stores and supplies, of preparing the necessary regulations and instructions, and of drawing up tables showing the war equipment of all units, is a labour of very considerable magnitude.

In the Imperial Army, for the United Kingdom alone, this work has occupied the undivided attention of five or six officers for nearly twenty years, while the duty of keeping the arrangements—now thoroughly decentralized—up to date, entails continuous work on all officers of the army, both staff and regimental. A great portion of the work thus accomplished is available for the guidance of Canadian officers, and the problem to be solved is, on the whole, simpler for the Dominion. But the conclusion is unavoidable that the number of officers available for this duty at Militia Headquarters, and in the several military districts is now, and apparently always has been, far too small to cope successfully with the task. So far as I can judge the preparation of a suitable mobilization scheme would require the undivided attention for some years of at least two general staff officers and one administrative staff officer at Headquarters, and of one administrative staff officer in each military district. When the scheme is completed, it is probable that the services of two of the officers at Headquarters could be dispensed with, but for the proper maintenance of mobilization arrangements, the remaining additional officers must be permanently retained. The staff at present maintained at Headquarters and in the Commands appears to me



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absurdly inadequate in numbers to deal successfully with the numerous problems which require its attention.

I understand that the standard of military preparation to be aimed at by the Dominion is the provision of 100,000 men immediately available in the first line of defence, with the necessary machinery for raising and organizing another 100,000 in the second line, and I assume that no departure from this policy is contemplated. This standard cannot be attained until definite arrangements for mobilization are completed and the immediate supply of the necessary war outfit assured. At present it would not be possible to put the militia in the field in a fit condition to undertake active operations, until after the lapse of a considerable period.

The value of mobilization preparedness is very great, and its cost, compared to other military expenses is but small, provided a definite and continuous policy is pursued.

### (C)—PEACE TRAINING.

Before expressing an opinion as to the standard of peace training reached by the Canadian forces and their methods of instruction, it will be convenient if I briefly recount the opportunities which I have had of forming a judgment on these matters.

My field training inspections were as follows:—May 21, the 8th and 9th Regiments of the 20th Infantry Brigade carried out a scheme of manoeuvre in the Lévis Camp at Quebec.

May 25, the Royal Canadian Dragoons carried out a reconnaissance scheme in the neighbourhood of Toronto.

May 26, the 13th and 91st Regiments at Hamilton performed some minor drill operations in their drill hall.

June 1 and June 2, the 14th Regiment of Infantry and the Royal Canadian Horse Artillery practised manoeuvre schemes at Kingston.

June 4, the Governor General's Foot Guards and the 43rd Regiment carried out an 'attack and defence' scheme in the neighbourhood of Ottawa.

June 8 to June 10, the Royal Canadian Regiment carried out field operations in connection with the fortress defence at Halifax, and the Royal Canadian Garrison Artillery worked their guns against a night attack by destroyers represented by government transport boats.

June 15 and 16, the 1st and 2nd Cavalry Brigade, and the 3rd, 4th, and 5th Infantry Brigades were seen both at field training and manoeuvre at Niagara-on-the-lake.

June 18, the 6th, 7th and 8th Infantry Brigades carried out field operations under Col. S. Hughes at Kingston.

June 20, at Petawawa Camp, the 3rd Cavalry Brigade was seen at field training, and the 2nd and 8th Brigades, Canadian Field Artillery, at manoeuvre and field firing.

Judging from all I have been able to see, I should consider the standard of training efficiency which has been reached by the troops of the Permanent Force to be satisfactory.

In my opinion their peace establishment is not large enough to enable them to properly carry out the work of supervising the training and instruction of the militia, and, at the same time, to permit of their attaining themselves to that perfection of field efficiency which it is very desirable should be possessed by the small regular force maintained by the Dominion.

For this reason, as well as those which I have brought forward in the course of this report, I think, when funds are available, the Royal Canadian Dragoons should be increased by one squadron, and a battery should be added to the Royal Canadian Horse Artillery.



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I cannot close my remarks on the training of the Permanent Force without expressing my admiration of the performance of 'A' and 'B' batteries of the Royal Canadian Horse Artillery at Kingston under Lt.-Col. Burstall, on June 2. I have no doubt it is in some degree owing to this officer's able instruction and supervision that the Canadian Field Artillery appear to have attained to the degree of efficiency which, considering the circumstances under which they serve, has caused me considerable astonishment.

Coming to the Canadian Militia, the first conclusion I have drawn from my observation of their work is that there is an absence of uniformity in the standard of efficiency to which they have attained.

Some units are far ahead of others in this respect, and even in the same command they seem to differ considerably.

This remark does not apply to the field artillery to anything like the same extent as to the cavalry and infantry.

Of the nine cavalry regiments I have seen in eastern Canada only two appear to me to have attained a standard of efficiency commensurate with the material in men and horses which they possess and the opportunity they have had.

I was favourably impressed with the standard of training efficiency reached by the two brigades of field artillery which I saw at Petawawa. Their riding, driving, manœuvre and firing practice seemed to me very remarkable in view of the short time they had been together in camp and the few opportunities they have.

As regards the field training efficiency of the infantry, I am of opinion that their methods of carrying out company and battalion training, so far as I saw them, are not up to date or suitable to the requirements of modern war, but I am compelled to add that, when I saw them manœuvre in the field, all ranks showed greater aptitude and knowledge than I should have thought they possessed.

The plans made and carried out by brigadiers were fairly sound and, on the whole, regimental and company commanders displayed intelligence and initiative in directing and leading their commands. I observed, however, many faults and mistakes which would not have occurred under a better system of company and battalion training.

Coming now to the training methods generally adopted, and commencing with the cavalry, I have already expressed the opinion that, as a whole, this arm is decidedly behind the others in regard to field efficiency, but I do not think that Canadian Militia cavalry officers are altogether to blame for this state of affairs.

It appears to me that the proper rôle of cavalry in a country like eastern Canada has not been correctly appreciated, and that the energies of those responsible for its training and inspection have not been used in a right direction.

In the whole of eastern Canada there are hardly any open spaces which admit of the employment of that form of engagement known as 'shock action.' If the most highly trained cavalry in the whole of Europe were put down to fight in this country they would find no opportunities of employing 'shock tactics' with any effect, and they would be compelled to act as mounted rifles.

But besides the character of the country there are other weighty reasons why the Canadian Militia cavalry must rely for their power of offence upon the rifle rather than upon the sword.

Amongst the most important of these reasons are—

- (a) The class of horse they ride, both as regards breeding and training.
- (b) The short time they are brought together.
- (c) The entire lack of highly trained regimental, squadron and troop leaders.
- (d) The impossibility of training higher commanders.

I think the rôle of cavalry in this country is to act altogether as mounted rifles, and the training on the cavalry should tend towards securing efficiency in this direction.



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The physique of the men is excellent, they ride sufficiently well, and the class of horses seen by me is quite suitable to the work of mounted riflemen in a close country. Their inefficiency is owing to faulty methods of training and instruction.

Squadron officers are not sufficiently grounded in their duties as leaders and instructors. As a rule they cannot lead properly, nor are they sufficiently instructed themselves to train and instruct their men.

There is nothing like enough troop and squadron drill instruction, and regiments are brought together under the commanding officer before squadrons are fit to work as part of a regiment.

The ability of all ranks of the cavalry to carry out the rôle which they will have to fulfil in this country is, so far as I have been able to judge, very much below what it should be.

Having regard to its great importance I strongly urge the necessity of increasing their annual camp attendance from 12 to 16 days, as is the case with the artillery.

For the rest, it is for the training department of the Militia Council to lay down a syllabus of training which is applicable to what is expected of that arm in war, and then for the officer charged with the inspection of the cavalry and Cavalry Brigadiers to enforce the constant practice of the syllabus, and to see that there is absolute uniformity of method throughout the whole force. The Inspector of Cavalry must make himself thoroughly acquainted with the qualifications of the brigadiers, commanding officers and squadron commanders, and report fully upon any whom he considers unfit to fill these positions.

Great care must be taken in the selection of young officers and non-commissioned officers, and they should receive a more extensive preliminary training, both theoretical and practical, than appears to be the case at present.

The methods of field training adopted in the field artillery seem to be sound and good and, so far as I saw them, they appear to lead to the best results. There can be no doubt that the standard of training efficiency in this arm is very high, considering the few opportunities they have of coming together and their untrained horses.

So much depends upon sound supervision and inspection that I cannot avoid again referring to the excellent work which has been done for the Canadian militia by the officers of the Royal Canadian Horse Artillery.

With regard to the peace training of the infantry, I am of opinion that far too much attention is given to the practice of ceremonial exercises and evolutions. In fact, the greater part of the time available for training appears to be devoted to drills of a type which in respect of training for war are nearly obsolete. A certain amount of drill in close order is necessary to inculcate steadiness and accuracy of movement, but considering the very limited time available for training of all kinds, I consider that such practices for the militia should be confined to company drills, and that the time expended in battalion and brigade ceremonial parades is largely wasted. Moreover, I have observed that the excessive practice of ceremonial—and the neglect of manœuvre—have apparently cramped both the initiative and the intelligence of the officers and men when employed in field manœuvres, with the result that mechanical, barrack-square accuracy is attempted without regard to the condition of the ground or to the effect of the enemy's action.

I can understand the natural desire on the part of the militia to make a good appearance on ceremonial parades. Even for this end, the true basis of training is the company, and practice in battalion and brigade, with insufficiently trained companies, will add nothing to ceremonial smartness. But elasticity and freedom in manœuvre are of infinitely greater value than any mere parade smartness, and these cannot be attained unless companies have opportunities of engaging in manœuvre on suitable ground and under conditions which simulate, in some way, an operation of war. It seems to me that, at present, smartness in drill is looked upon as an end to be attained instead of merely as a means of acquiring efficiency in manœuvre, which is the real preparation for war.



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For this excessive devotion to ceremonial the training staff cannot be held free from blame. On the only two occasions on which I saw classes of young infantry officers at training schools, one class was employed at ceremonial brigade drill and the other at the practice of saluting with swords.

The syllabus of infantry training should be revised; brigade and battalion ceremonial drills should be discouraged, and more time allotted to company drill and manœuvre (Part II., Infantry Training). Every opportunity should be taken of practising the troops in field manœuvre, and the instruction in the schools should be of a more tactical and less of a ceremonial nature.

I have had but few opportunities of observing the field training of the Canadian Field Engineer companies, but those which I saw at Petawawa camp seemed making very satisfactory progress towards efficiency.

It appears that the principle which has had such excellent results in the Territorial army, of utilizing to the utmost the special expert knowledge and training which abounds in civil life and turning it to the purposes of national defence, is also very apparent in Canada.

There is only one telegraph company, and I think steps should soon be taken to place this important branch of military engineering on the same efficient footing as the field companies appear to be.

#### (D.) ARTILLERY PRACTICE, MUSKETRY AND RANGES

I inspected the artillery ranges at Petawawa, and was much impressed by the suitability of the ground for artillery manœuvres and practice. The equipment of the ranges and the management of the targets were satisfactory.

I saw the 2nd and 8th brigades at practice.

Considering that these brigades had been only a few days in camp, the results were surprisingly good. The practice was carried out under a suitable scheme, and was well conducted. Battery commanders appeared to have a good knowledge of the theoretical principles of artillery fire, and with more opportunities for practice would, I feel sure, soon acquire the quickness and accuracy in which they are, naturally, at present somewhat lacking.

I was able to inspect only a few of the rifle ranges, but I understand that, although insufficient in number to meet requirements, they are generally satisfactory. It should be remembered that, for the efficiency of a force whose opportunities of training are so limited, ample and convenient range accommodation is an absolute necessity. I have observed with satisfaction the large provision of auxiliary apparatus for musketry training, such as sub-target rifles and miniature ranges.

The musketry practice which I observed was being fairly, although somewhat leniently, conducted.

#### (E). CAMPING GROUNDS AND DRILL HALLS.

I have visited the camping grounds at Petawawa, Niagara, Barriefield and Lewis.

The acquisition and establishment of the camp at Petawawa seems to me to be the most important step which has yet been taken towards securing the efficiency of the troops in war.

It is an ideal terrain for the instruction of forces for fighting in country such as that of eastern Canada. The great extent of ground which it covers, a great part of its surface being wooded and of an intricate nature, its gentle undulations, and its position on the banks of the Ottawa river, render it capable of fulfilling all the requirements of a great central camp of instruction.



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As the wide extent of country covered by the camp at Petawawa is capable of affording very valuable instruction to a large number of troops at one time, I strongly recommend that the fullest advantage be taken of it, especially in view of the fact that all other camping grounds in the country are much too restricted for the numbers of the troops which have to use them.

The Western Ontario Command contains a larger number of troops than any other command, and the camp at Niagara which they use is, in my opinion, much too restricted in area for efficient training and instruction. I understand that the ground west of the rifle ranges has only recently been acquired, and, so far as it goes, it seems very suitable for the purpose.

The manœuvre exercises I saw carried out there of three brigades of infantry showed clearly, however, that it is much too small for use by so large a body of troops.

The same remarks apply with even greater force to Barriefield and Lévis. At the former place I saw the manœuvre exercises carried out by three brigades of infantry. The ground was so restricted that there was little freedom or scope for the display of initiative or intelligent leading either by brigadiers, battalion or company commanders.

At Lévis I saw only two battalions exercised in manœuvre, and they really seemed to me to be the maximum force which could be efficiently trained in so small an area, and yet this is the only manœuvre ground available for the Quebec Command militia of No. 7 Military District.

I must point out the necessity for due care being taken by the staff at these annual camps to ensure the training area being allotted to units in a more methodical manner than appears to be the case at present.

For example:—At two camps which I visited I found several distinct units, each doing different kinds of training, or carrying out separate manœuvre schemes, using the same area ground, and interfering with one another to such an extent as to materially prejudice the value of the instruction.

Whilst these troops were thus pressed together in one space of ground, there were other available areas which were not being used at all.

The terrain of all camping grounds should be mapped out into areas of suitable size and allotted to units for a certain specified time. The nature of the training and the kind of ground suitable to the special arm should be given due consideration.

I inspected the drill halls at Quebec, Montreal, Toronto, Hamilton, Ottawa, Halifax, St. John and Kingston.

Some of these were fine buildings and establishments, whilst others were not so large and very incomplete as regards accessories.

A capacious and well found drill hall is of great importance to the efficiency of a city corps. If it covers an adequate space of ground and possesses miniature ranges, valuable instruction can be carried on at all times, and in all kinds of weather throughout the year. Good and commodious accessories, such as officers', sergeants', and corporals' mess rooms, and men's recreation and club rooms, must have, if well managed, a wholesome effect on the esprit de corps and well being of the unit, and are, besides, of great assistance to recruiting.

One drawback common to all the drill halls I saw, except those at Ottawa and Halifax, was the absence of an open space adjoining, or close to, the drill halls.

I understand that these city corps seldom, or never, attend camp, as it is alleged that the men cannot be spared from their civil employment.

I cannot agree with this custom, and strongly recommend that it should cease.

In an irregular force nothing can compensate for the advantages gained by concentrating the troops in these annual camps.

The difference between the training efficiency and elasticity of battalions which have been accustomed to attend these camps and those city battalions which have



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not had these advantages is very marked, although the appearance, setting up of of the men and the ceremonial movements of the latter may lead to an entirely erroneous opinion being formed as to their equal, if not superior, value as fighting corps.

### (F)—COMMAND AND STAFF.

The command and staff of the Canadian Forces are, to some extent, modelled on the lines of the Imperial army.

The Militia Council is a body which is charged with the functions of a Commander in Chief.

In time of war a Commander in Chief is specially selected and appointed by the Government.

The link between the Militia Council and the troops is the Inspector General who is himself in close touch with both.

So far the Imperial and the Canadian systems are identical.

In Canada, however, the Inspector General is himself a member of the Militia Council.

I cannot help thinking that, in this respect, it would be better for Canada to follow the example of the Army Council at home.

It is, of course, necessary that the Inspector General should be in close touch with the Minister, the Chief of the General Staff, and each head of a Department of the Militia Council, and he can well remain so without being himself a member of Council.

The great objection is that, as a member of the Council, he must in time be regarded as *de facto* Commander in Chief.

He is the one member of Council who is empowered to exercise individual authority on the parade ground or in the field, and, as such, the troops cannot do otherwise than practically regard him as the head of the forces.

Further than this, the Inspector General's duties are of so responsible and onerous a nature that they need his whole time and attention.

I therefore recommend that the Inspector General and his department should be constituted on the same lines as in the Imperial Service.

The Inspector General must, of course, always remain in close touch with the Minister and the Chief of the General Staff, reporting to them constantly, and I am of opinion that it would add much to the smooth despatch of Militia Council business if he took opportunities of holding frequent consultations with the Adjutant General, the Quartermaster General and the Master General of the Ordnance with respect to matters which have come to his notice connected with their departments. This is the custom adopted by the present Inspector General.

Since the Office of Inspector General has been held by Major General Sir Percy Lake his whole time has been taken up in supervising the organization and reconstruction of the Canadian Forces.

His advice and assistance have been sought and obtained in every department, and the result of his knowledge, skill, tact and patience are apparent everywhere.

Sir Percy Lake has only been able to devote a part of his great ability to the work of actual inspection and direction of the inspectors under him, and I believe there are very few men who could, under the circumstances, have done anything like so much in the way of training supervision. His hand and his direction are apparent in all the training work of the troops I have seen.

If due efficiency in training is to be expected in the future the Inspector General cannot be hampered in this way.

I think the officers commanding the permanent cavalry, artillery, engineers and infantry, respectively, should act as inspectors of these arms in the Militia.

I am aware that this is done in the case of the cavalry and artillery, and to a certain extent in the case of the engineers, but I regard the other arms as standing



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in quite as much need of the attention of a specialist officer, who should be entirely under the orders of the Inspector General.

Coming to the various commands, I have really had but little opportunity of testing the capacity of either chief or subordinate commanders. I am, therefore, unable to say whether they are capable of fulfilling the functions of higher command in the new organization which I have recommended. From my own observation of the large number of senior officers who have come under my notice, I should judge that such officers exist.

I wish to emphasize the necessity for the exercise of the utmost care in the selection of officers for the higher commands. The fighting value of a division in war depends, in these days, so much upon the training ability of its commander and the methods he has adopted in peace time to prepare his command for war, that no consideration except that of fitness for the post should be allowed to weigh in selecting officers for this important rôle.

In some of my inspections of single regiments I have commented upon the absence of the brigadier and his staff, and I was told that it was not considered necessary for them to be present on such occasions. If this is really the case, I think a most important principle of command has been overlooked. The brigadier is, and should be, held responsible for the efficiency of the units under his command.

One of the most important principles to be followed and carefully observed is continuity in the chain of responsibility throughout all ranks.

The officers employed on general and administrative staff duties appear to me to be well selected and to perform their various duties in a satisfactory manner.

They are, as a rule, energetic and hardworking, and seem to cope with their many difficulties in a resolute fashion.

In many cases I believe they are men of business who are able to bring to bear on their important task a valuable knowledge of men and affairs.

In administrative matters they are well informed, but, with a few exceptions, their education in the duties of the General Staff is somewhat incomplete.

I think every effort should be made to afford opportunities to those who are unable to attend a staff college, to practice by means of staff tours, war games and conferences the very important duties which they would have to perform on service in the field.

I recommend also that, if possible, they should be relieved of some portion of their administrative work in order that they may take a more active part in the military education of officers and in the war training of the troops. The increase to the staff which I have recommended for mobilization purposes in another part of this report would probably be sufficient for this purpose.

In my inspections and observations of the troops I have sometimes noticed a somewhat unfortunate and tactless interference with regimental officers by the staff. I think this should be carefully guarded against.

I regard the establishment of the Corps of Guides as being a most valuable and useful adjunct to the staff. I think it is a principle which is capable of extension.

I cannot close this part of my report without adding a few words as to certain opinions which I have heard expressed in influential quarters in this country. I refer to the erroneous ideas which are often propagated with respect to the numbers and composition of the staff.

It is evident that people who hold such views have absolutely failed to grasp the most elementary factors to be considered in the solution of military problems.

They are, apparently, quite unaware of the fact that the range and destructive power of firearms, both infantry and artillery, are at least a hundred fold greater than formerly, and that, consequently, a much higher scientific knowledge is required in those who have to handle them and direct their fire. Again, the enormous increase in the size of modern armies is entirely overlooked.



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It follows from this, that the main result of these two conditions, namely the vastly greater extent of modern battlefields, is altogether ignored.

Surely the merest novice in military affairs can understand from all this that the brain power of an army must, of necessity, be infinitely greater and more widely diffused than formerly.

It was as much as the brain of Wellington, with the assistance of his small staff, could do to direct the operations of the battle of Waterloo on a front of some 5 or 6 miles. Would the same staff have sufficed him to bring to the same successful conclusion the battle of Mukden, which was fought on a front of 100 miles?

The fact is, that these critics do not in the least understand how complicated and technical a business war has now become, not only in its combatant but in its administrative aspects.

The average citizen, while recognizing that the soldier requires to be fed, clothed and equipped, does not readily realize what this means in practice. Having himself usually a fixed abode, he becomes accustomed to rely upon the trademen with whom he deals to supply his wants as they arise, with the minimum of forethought on his part. The nature of the problem which faces the military administrator, when dealing with an army in the field, may, perhaps, be most readily understood from the following simple illustration:—

The size of the force which Canada aims at being able to place in the field in case of emergency is, as has been previously noted, 100,000 in the first line. This means that the strength of the main force would not fall far short of the population of the city of Ottawa, the capital of the Dominion.

Bearing this in mind, it will be seen that the organization prepared by the Canadian military administrator has to be such that, at a moment's notice, a body of men nearly as numerous as the whole population of Ottawa, can be moved, at the General's will, any distance up to 20 or 30 miles daily, in any direction, both distance and direction being liable to be changed without warning in the middle of a march, and yet find, at every halt, food, water, fuel, and usually shelter, provided for, their deficiencies in clothing, ammunition, horses, &c., made good, and their sick and wounded collected and cared for.

This is one of the tests of a sound military system, and yet it is but one, and perhaps one of the simpler demands upon the military administration. The problems of maintaining a regular supply of trained men and horses to replace casualties in the ranks, or of keeping up constant and reliable communication between the different units of a force operating over an area of perhaps several hundred square miles, are even more difficult,—and there are many others.

This is the question of administration only—the art of handling large masses of men in the actual combat is even more difficult and exacting.

The deduction to be drawn from these considerations is, that, alike for the organization and training of the army in peace and for its administration and control in war, a large and sufficiently trained body of staff officers is indispensable. A staff officer cannot learn his duties after war has broken out, and an inefficient staff will nullify the efforts of the best commander and the best trained troops in the field. Moreover, to be an efficient staff officer demands quite exceptional qualities. He must not only be well educated, able, businesslike, but he must work hard and devote continual study to the technical side of his profession in war, and must give himself constant practice in the performance of his duties during peace. It demands from him an amount of ability and hard work which would ensure success in the ordinary walks of life. If a sufficient supply of officers possessing these qualifications is to be obtained, sufficient inducements must be held out to bring men forward to qualify themselves for the work.

Such inducements may take either of two forms—special advancement in their profession or increased pay. In a force constituted as is the Militia force of the



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Dominion, the former is hardly feasible and would involve serious drawbacks, and the true solution would appear to lie in the direction of pay higher than that of the regimental officer, and at a rate generally comparable with what a successful business man would receive in civil life.

At present there can be no doubt but that the militia staff is inadequate for the amount of work required to be done, and that the efficient staff officer is underpaid, both as compared to the regimental officer and in relation to the quality of the work performed.

The demands upon a staff officer in the way of expenditure are heavy and frequent, and the increase in the cost of living of late years, while it has hit the officer and the civil servant alike, has been especially severe upon District Officer Commanding, and the staff officers both at Headquarters and in the Commands and Districts.

I venture to think that this subject deserves the early and serious consideration of the Dominion Government—efficient staff officers are an indispensable part of any military force, if it is to be effective; they cannot be improvised when war threatens, and material inducements appear to be requisite in order to lead officers to submit themselves to the constant work and severe self-education necessary to develop an efficient staff officer.

The holding out of rewards to efficient officers might well be accompanied by a strict weeding out of those others who have not made themselves proficient in their duties.

#### (G)—ROYAL MILITARY COLLEGE.

On June 2, I inspected the Royal Military College at Kingston.

I saw the cadets formed up on parade. They appeared to me to be a very fine body of men, averaging about 19 years of age, well set up and smartly turned out. Their drill and marching were excellent.

After the parade I went through the class rooms, lecture rooms, dormitories, &c.

Some specimens of military plans and sketches executed by the cadets were laid out in one of the class rooms, which indicated excellent instruction and satisfactory proficiency in topography.

The bath room and sanitary arrangements seemed good and suitable.

There is a workshop, where the cadets learn and practise carpentering and handy work generally. I think this is a particularly useful establishment.

The chemical laboratories, electric science models, machines, &c., were indicative of the excellent general education which is imparted to the cadets.

There is a large covered building which is given up to practical instruction in field fortification and engineering. An excellent model of ground covers the whole space.

Good provision appears to be made for sport of every kind, particularly those connected with the hard winters, which last so long in this country.

There appear to be excellent boating and bathing facilities on the shores of the lake and river which almost surround the college.

I visited the gymnasium, and saw the whole of the senior class of cadets carrying out gymnastic exercises in a style which I have never seen excelled in any institution I have inspected.

There appears to be a valuable collection of books, but nothing in the nature of a reading room, which would be a useful addition to such an institution as this. I have also to remark upon the fact that there is a deficiency in the necessary number of dormitories. When two cadets are compelled to occupy the same room, opportunities for private study are very much curtailed, and the best advantage is not obtained from the excellent course of study provided at the college.

A riding establishment has just come into existence, with good stabling, &c.



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There is no riding school, but only an uncovered manège. I think, considering the length of the winter and the hard weather, in this country, that a covered riding school is a most necessary adjunct.

In this connection I may mention that there is a skating rink, which is also uncovered and which, for similar reasons, should also be covered in. It is of importance that the cadets should have every opportunity for getting hard exercise throughout the year.

The outside direction of the college is largely in the hands of a Board of Visitors, which reports to the Militia Council. The Board is composed of past and present Canadian officers, members of parliament and eminent educationalists. Sometimes the Inspector General or the Chief of the General Staff is on the Board, but not always. I venture to think that it should be a rule that one or the other of these officers should, invariably, be a member.

There appears to be a very good and efficient staff of officers and professors, and I am persuaded that the instruction throughout is sound and good.

Referring to the subjects embodied in the syllabus of instruction at the college, it appears that no lectures are given in military history and that no campaign is regularly studied. There is thus no opportunity of practically applying theories which have been studied and learned. I strongly recommend attention to this point.

A great feature of the college is the endeavour to make it answer the purposes of a national 'war school' by holding 'long' and 'short' courses, special instruction classes, &c., for both permanent and active militia officers.

I have heard much of the Royal Military College at Kingston, and from what I have observed I feel sure that the celebrity which the institution has earned throughout the empire on account of the good work it has achieved is well justified.

The constitution of the Royal Military College seems to indicate the main intention of its founders. A few graduates are chosen every year for service with the regular army, whilst others join the Canadian Permanent Force. The great majority of the graduates do not, however, adopt soldiering as their principal business or calling in life. They become Reserve Officers, and constitute a body which, owing to the fine preliminary training which they have received, should be a great strength to national and Imperial defence.

A country like this, which is in course of such rapid development cannot hamper its best citizens in pursuing their several avocations in the direction of national advancement and national development.

The principle then, of giving to a large proportion of its brain power the advantage of military training and education is a great asset in the provision of national defence, for the supply of efficient officers in a crisis is assured.

For these reasons I venture, in this report, to urge most strongly the extension of the principle embodied in this excellent system, of giving military training to the youth of Canada.

It appears to me that, at present, the general effect upon the country is infinitely less than it might be if the college at Kingston were greatly enlarged, and perhaps a similar institution established elsewhere.

It is perhaps, hardly within my province to make such recommendations, but I realize so fully the value of the work already done, and the great necessity for securing a higher standard of military education and knowledge amongst the officers of the Active Militia that I feel impelled to state my opinion emphatically.

There is another point of great importance to which I desire to call attention. It appears that, at the present time, the Dominion educates a number of young men, to a large extent at the expense of the state, and gets no return from them in the way of military service. In a country like Canada, which maintains no regular army, the question of national defence is of the utmost importance to every individual citizen, and whilst, in my opinion, every one is morally bound to take some share in



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this great work, I consider a full share may be justly demanded from those citizens who have had the advantage of being educated at the Royal Military College.

I am aware that graduates are obliged to become Reserve Officers for a certain number of years, but I think they ought either to be compelled to take service with the Active Militia for a period of at least ten years, or, if they can show satisfactorily that they are not in a position to do this, they ought to be called upon to undergo military training at intervals of two or three years, and to pass a certain qualification test to ensure their ability to furnish that return to their country for which the education they have received at the Royal Military College renders them amenable.

## (II)—REGIMENTAL OFFICERS.

I am informed that there has been a great improvement in recent years in regimental commanding officers. I have had little opportunity of personally judging of their merits, but I have observed them chiefly to be young, energetic men, of active habits and possessing business capacity.

It appears that, before commanding a regiment, an officer must have qualified on entry, and subsequently as a captain, and again as a field officer, and, in addition, he must have passed for some period under the close observation of the Inspector General and the officer commanding his District.

Provided these tests are thoroughly applied they would appear to be sufficient for the purpose, but I am informed that conditions and requirements are often relaxed, and this, probably, accounts for the fact that some commanding officers who have come under my notice are unfit for their position. I recommend that the attainment of the qualifications be enforced to the utmost limit, for I hold that, without efficient command, no unit can be considered of any effective use in the field.

What has struck me more than anything else in this connection is the fact that, whenever I have visited camping grounds, I have seen nothing but regiments and battalions working together under the commanding officer, although squadrons and companies have only been under training for a few days and are quite unfit to be worked together.

It would appear that commanding officers have not realized the fact that the efficiency of the individual squadron or company is the essence of all sound military training, and they do not seem to have power to direct and supervise such independent training.

To be able to do so in an efficient manner, and without undue interference, is one of the highest and most necessary qualifications for a commanding officer to possess.

With regard to squadron, battery and company commanders, I have to remark that, although I have noticed a display of much activity and energy amongst them, there is everywhere considerable room for improvement.

I notice that they are not, apparently, given a sufficient measure of responsibility when they are concentrated with their regiments, but appear to be kept too much in leading strings under the regimental commander.

The attitude of these officers towards their men, when engaged in drill and manœuvre, leaves a good deal to be desired. They issue rough, sharp instructions and directions, without giving their men any reasonable explanation why they are expected to do certain things. They altogether fail, it seems to me, to appeal to their men's reason and intelligence, a principle which should be at the very root and foundation of all intercourse between officers and men, particularly in a force like the Canadian Militia.

On the other hand, I have noticed that they do not maintain a proper discipline amongst their men when engaged in field exercises. I have heard talking and shout-



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ing, and all sorts of irrelevant conversation going on whilst a manœuvre, which demanded the close attention of all ranks, was in course of being carried out. The officers were standing by and taking no notice. Here, again, appeal might well have been made to the men's reason and intelligence.

It seems to me that qualification tests must have been a good deal relaxed, for squadron and company commanders do not appear to know enough themselves to instruct the young officers under their command, or to impart that theoretical instruction to all ranks of their command which is absolutely essential to practical training for war.

Turning to the junior officers, the general stamp is good, and, provided the existing qualification tests are strictly enforced, they ought to be quite capable of efficiently officering the Canadian Militia.

From the outset of their instruction they should be taught, before all things, initiative and resource, and some responsible charge, however limited, should be confided to them.

If the Royal Military College principle could be more widely extended a much larger proportion of militia officers would be graduates of that institution, and the effect on the efficiency of the force would be incalculable.

## (I)—NON-COMMISSIONED OFFICERS AND MEN.,

The good selection and adequate qualification of non-commissioned officers is one of the most important conditions for the efficiency of any military unit, and I feel assured, from all I have observed, that this requires far greater care and attention than it now receives.

It is not at all unusual, I believe, for non-commissioned officers to be found serving as such at their first attendance in camp.

Non-commissioned officers should be chosen by unit commanders from amongst the best men in the ranks of their command. They should be selected for their superior knowledge and intelligence, and should be required to pass a certain qualifying test.

For this purpose schools of instruction should be available and every facility should be afforded to enable men selected for non-commissioned officers to study and qualify as such. Whatever expense this may entail to the state (and it cannot be a very great item), is absolutely essential to the fighting efficiency of the forces.

In respect of non-commissioned officers, I understand there is a great difference between city and rural corps.

In such units of the Canadian Militia as have come under my observation I consider the physique of the men is very good, although, in some corps, I have noticed a sprinkling of mere boys.

I have, as a rule, been much impressed by their smart turn out, their set up and their bearing on parade. Their marching and manœuvre were also decidedly good for non-regular troops, and there can be no doubt that they are pervaded by a fine patriotic spirit, energy, and a great desire to do all in their power to render themselves efficient. They appear to be quite amenable to discipline when it is properly enforced, and generally to possess intelligence and resource.

I have to add that I have been informed by competent authorities that the physique of the men composing the Canadian Militia is not so good as that of the inhabitants of the country, but I cannot speak from my own personal knowledge.

I am further informed that the term of service engagement of three years is hardly ever exacted.

I consider this to be very prejudicial to the efficiency of the force, and it is my duty to state emphatically that, unless the very limited term of service which every



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man undertakes to carry out when he joins, is fulfilled to the last day and hour, and every available moment is used for the purposes of training and instruction, the Canadian Militia can never be considered in an efficient condition to undertake the responsibilities for which it exists

### (J)—HORSES.

I regret that there has not been sufficient time or opportunity to study the horse question in Canada as fully as I should have liked. I am, therefore, unable to express any reliable opinion as to the best means of meeting military requirements.

It is, however, quite clear to me that satisfactory arrangements for the adequate supply of horses for war do not exist throughout the Dominion, and I desire to draw attention to the danger which such a state of affairs involves.

In Appendix 'D' will be found a short statement of peace training and war establishments of horses for the mounted troops in Canada.

I am informed that there is little doubt of these numbers being forthcoming on mobilization.

It can be taken as certain that at least 10 per cent of these numbers would be found unfit for service, so that, taking 33,000 as being the number required, some 3,000 of these would have to be made good from reserve sources.

In a serious war it must be expected that within 6 weeks 50 per cent of these numbers would be required to make good losses and deficiencies, and a similar number 6 weeks later.

A reserve of at least 30,000 horses of all kinds would thus be necessary to keep the mounted troops of the Dominion efficient within three months of the outbreak of war, which, with the 3,000 required to make good unfits on mobilization, makes a total of 33,000.

I am informed that even with the best mobilization arrangements and supervision it would be very difficult to register so large a number but, with matters as they are at present, it would be impossible, for no machinery exists for such a purpose except certain registers of draught horses in Commands and Districts.

I recommend that an Assistant Director of Remounts be added to the Department of the Quartermaster General, with a suitable inspection and veterinary staff.

His duties would be:—

(1) To keep the Militia Council fully acquainted with the numbers and classes of horses produced annually for training;

(2) To supervise the service rolls of mounted units and ascertain by inspection and inquiry if the horses shown on such rolls are really available and fairly fit for service;

(3) To take over the registration department and to thoroughly exploit the horse resources of the country with a view to securing as large a number as possible registered to complete the numbers which would be required on mobilization;

(4) To arrange for the establishment of horse depots in war and to undertake all mobilization arrangements as regards horses and transport.

As regards the permanent force, I think a small permanent horse depot should be kept up in time of peace at some convenient central place.

Considering the nature of the country, particularly in the west, and the general conditions of life in Canada, mounted troops seem likely to play an important part in warfare conducted in North America, and the possession of carefully economized horse reserves would probably prove of great value and would give much advantage to the side which is best prepared in this respect.

I have conversed on the subject with several competent authorities in the country, and there appears to me to be a consensus of opinion that breeders require more



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government help and encouragement. There are, apparently, some determined and energetic efforts now being made to improve the horse supply of the Dominion, notably by an organization known as 'The Horse Breeders' Association.'

It is well known that conditions in the Dominion of Canada favour horse breeding on a large scale, and, if these facilities are fully developed and encouraged, it is quite possible that the Dominion might, in time, become the chief source of horse supply for the Empire, which would go far to solve a very difficult problem.

## (K)—ARMAMENT AND AMMUNITION.

## FORTRESS ARTILLERY.

The armament of the fortress at Halifax and the river forts near Quebec seemed suitable for the purpose.

## HEAVY FIELD ARTILLERY.

The armament of the heavy field artillery batteries is suitable, but there is so little scope for the full development of fire at such long ranges in densely wooded country, that it is a question in my mind whether the result obtained by the employment of such heavy ordnance in the field will, in most parts of eastern Canada, outweigh the expense and difficulty of the transport with which it is necessary to furnish them.

## FIELD HOWITZER BATTERIES.

There appears to be only one howitzer brigade in the Dominion. It is armed with a 5-inch gun which is very suitable.

I have elsewhere expressed the opinion that the full proportion of howitzer batteries, as laid down in Imperial divisional organizations, should be provided in Canada.

It seems to me that the vertical fire of howitzer batteries might be very effective in the kind of country in which they will have to act.

## HORSE AND FIELD ARTILLERY.

The armament adopted is similar to that used in the Imperial Army, and the re-armament of the batteries is, I understand, progressing very satisfactorily.

I have remarked elsewhere upon the absence of field telephones with batteries, and I think that such an important essential should be provided as speedily as possible.

## RIFLES.

Having regard to the trials which are now going on in all the great military centres of the world of a proposed automatic rifle I have no remarks or recommendations to make on the subject of the difference in armament between the Canadian and Imperial Forces.

It is to be noted, however, that the most important essential is assured in the similarity of the ammunition used by the Ross rifle and that used in other parts of the Empire.

## AMMUNITION.

I understand there is a reserve of shrapnell shell ranging from 500 to 1,000 rounds per gun. I am of opinion that this is not enough and that it should be at least double. There is, also, in my opinion, a considerable deficiency in small arm ammunition. I am told that 40,000,000 rounds are now in store. This amount should be doubled before the position can be considered satisfactory.



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## BAYONETS.

I have nothing to add to the few remarks which appear under the heading of 'Manufacturing Establishments.'

## SWORDS.

I would call attention to the remarks of Major General Sir Percy Lake in his annual report for 1908-09 on this subject. I concur generally with the opinions he expresses.

In one or two of the cavalry regiments which I inspected in this country I have seen such excellent cavalry material, both as regards men and horses, that I feel assured, when they had been together for a few weeks after mobilization, they would be capable of acting effectively with the *arme blanche* in small bodies on a sudden emergency.

I should like to have equipped such regiments with the sword, but I am aware that many other conditions are involved, and I do not, therefore, feel myself in a position to do more than put forward the suggestion.

## (L)—ADMINISTRATIVE SERVICES.

I saw some Canadian Army Service Corps Companies at Niagara and Petawawa. They were doing the transport and supply work of those large camps in a very efficient and satisfactory manner.

The principal of enlisting special expert skill and talent into the military service is also apparent here, and very good progress is being made in this branch of the administrative services.

The Canadian Army Medical Services is also receiving much care and attention. I inspected several Field Ambulances and Hospitals at the various camps, and was much struck by the energy, skill and efficiency everywhere displayed.

Although it has no bearing upon the subject immediately under report, I cannot help remarking that full value cannot be derived from the satisfactory condition of the administrative services in the absence of a sound system of peace organization in war divisions.

## (M)—FORTRESSES AND ARMED POSTS.

I inspected the fortress at Halifax on June 8, 9 and 10, and on June 10 I saw shell practice from Sandwich battery. The practice from the 6-inch guns was only fair, observation being faulty. The practice from the 12-pr. guns, at short range, was good.

On June 8 and 10, I visited all the defence works. The batteries are in good condition; the armament, equipment and ammunition in good order, and as complete as is possible pending the execution of certain alterations. I consider that the defences are sufficient to protect the harbour from attack by sea.

On the evening of June 9, I saw the electric lights at work. They are powerful and effective; well placed and well worked. The tugs which were employed to run past the lights into the harbour were easily discovered and clearly shown up. A detachment of active militia artillery manned the guns at Fort Hugonin during this operation, and fired blank against the tugs. The drill was well carried out; the arrangements for warning the battery worked effectively and the whole practice was highly satisfactory.

On June 9 I inspected the 'movable armament,' and considered the question of land defence.



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In my opinion the arrangements for land defence have not been sufficiently worked out, and are incomplete. The battery at Sandwich Point offers a tempting objective for a sudden raid, and the possible capture of Halifax might well induce an enemy to undertake land operations on a large scale.

Considering the nature of the country the 'movable armament' is probably sufficient, but the infantry immediately available for defence consists only of six companies of permanent troops and three militia battalions. This force cannot be considered sufficient to ensure the safety of the fortress.

On June 9 I visited the barracks, hospital, A. S. C. establishments, engineer lines and workshops, and citadel. I found everything satisfactory.

I am not quite satisfied that the mobilization arrangements are as complete as they should be, especially with regard to the provision of a sufficient number of fortress engineers.

I visited the forts on the St. Lawrence on May 31.

The batteries designed for the defence of the St. Lawrence channel appear to be suitably placed and will be sufficiently armed when completed. A suitable force must be detailed for their defence by land.

The forts erected about 1870 for the protection of Lévis from attack by land from the south may prove to have some value as 'points d'appui' for the garrison of Quebec, but I do not recommend that any further expenditure be incurred upon them.

The necessary arrangements can be embodied in a Quebec defence scheme.

(N)—SCHOOLS OF INSTRUCTION AND MANUFACTURING ESTABLISHMENTS.

I inspected the School of Garrison Artillery at Halifax. This establishment is well equipped and I consider that useful instruction is given to officers and non-commissioned officers.

I saw two schools of instruction for infantry at work at Quebec and Toronto. The instructors and the officers under instruction appeared to be applying themselves with diligence to their work, but I am not satisfied that these courses are as valuable as they ought to be. At both places the classes which I saw were engaged in purely ceremonial work, and the instruction was given by old fashioned methods. I think that more might be done in the way of lecturing and teaching the principles of field manoeuvre and fire action. Care should also be taken that the instructors do not yield to the temptation to make their work easy by rattling off memorized extracts from the drill book—which any officer can read for himself—instead of by personally illustrating the manner in which the instructions of the text books should be carried out, and explaining the intentions of the various exercises and the military end for which they are designed.

I consider also that simple tactical schemes might be carried out with great benefit to the officers who attend these courses.

Speaking generally, more attention might be paid to the essentials of war training and less time given up to non-essentials.

I saw a class at the Cavalry School at Toronto, and artillery classes at Kingston and Quebec, but was unable to make any detailed inspection of them.

I understand that the School of Signalling produces satisfactory results, and I anticipate that the proposed system of instruction in musketry will have a beneficial effect.

I inspected the Arsenal at Quebec on May 31. This establishment appears to be under very capable management, and I was much struck by its orderly and business-like arrangements. I consider it to be a valuable asset in the military resources of the Dominion, and I should judge that, by judicious expansion, its value may be



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materially increased. In certain respects, Canada is not yet, in a military sense, self-supporting, and, although it may not be necessary for the Dominion to be entirely independent of outside supply, yet every advance in this direction is an addition to security.

Some structural alterations and enlargement in the arsenal buildings appear to be necessary.

I visited the Ross Rifle Factory at Quebec on May 31. The buildings and plant appear to be in excellent order.

The inspection branch appears to be efficient and well managed. Its officers brought to my notice what appeared to be a defect in the specifications governing the hilt of the present bayonet, but I understand that this question is already receiving your attention.



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## PART II.—WESTERN CANADA.

I visited the places in western Canada on the dates mentioned in the itinerary. (See Appendix 'A').

I am unable to report as to the military situation in detail, as in the case of eastern Canada, because military organization in this part of the country has been undertaken comparatively lately, and is only in process of development.

Whether it is keeping pace with the economic progress of western Canada is a question upon which I do not feel myself competent to judge, but when the enormous area under cultivation in the western part of the Dominion is considered, and the greatly enhanced value of property, it would appear that the forces maintained for its protection are, comparatively, very small in number.

The military relations of western Canada to the rest of the Dominion may be likened to a great open plain which lies under the partial protection of a fortress.

The west will, of course, always be liable in time of war to raids, and the adequate defence of the Canadian Pacific and other railways have to be provided for.

The character of the country between Winnipeg and the eastern slope of the Rocky Mountains is admirably adapted to the employment of mounted rifles supported by horse artillery.

A certain amount of infantry and, perhaps, heavy artillery, will be necessary to defend Winnipeg and other important centres, to hold posts on the railway lines, and to act as rallying points to mounted rifles.

This appears to be the principle upon which the organization of the military defence of the west is proceeding, and I am of opinion that it is in accordance with the needs of the situation, excepting as regards the paucity of numbers alluded to above.

At the headquarters of Military District No. 13, at Calgary, I saw the camp established there under Lieut.-Col. Cruikshank.

I was present when a manœuvre was carried out in the adjacent country by the following troops:—

- 15th Light Horse.
- 19th Mounted Rifles.
- 21st Hussars.
- 23rd Alberta Rangers.
- One Squadron, Light Horse.
- 25th Battery, C. F. A.
- Corps of Guides (M.D. No. 13).
- Signalling Corps (M.D. No. 13).
- No. XVII Cavalry Field Ambulance.

The men were of excellent physique and rode, generally, well.

The horses were of a good stamp, and admirably suited to the work they were doing.

The officers had the makings of good cavalry leaders, and there appeared to be an excellent understanding between them and their men.

The manœuvre, however, revealed many shortcomings, and showed a considerable lack of training and knowledge.

The principal fault lay in failure to use ground to the best advantage and to secure cover from firing.

There was much undue exposure to led horses when the men were taking a position dismounted.

The artillery, however, was very well worked.

The camp and horse lines were well laid out and well kept, and both officers and



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men displayed considerable aptitude in the care and management of horses in camp, qualifications which are so essential to the efficiency of mounted troops in the field.

On the whole I think the troops of No. 13 Military District are progressing in a right direction, but I must point out that there is considerable room for improvement in their methods of handling and working mounted riflemen in the field.

On June 29 I visited the camp at Sewell, composed of troops of No. 10 Military District, under the command of Colonel Steele, C.B.

I witnessed a field manœuvre in which the following troops were engaged:—

12th Dragoons,  
16th Light Horse,  
18th Mounted Rifles,  
20th Border Horse,  
22nd Light Horse ('A' and 'B' Squadrons),  
13th Battery, C.F.A.,  
Corps of Guides (M.D. No. 10),  
99th Regiment,  
Signalling Corps (M.D. No. 10),  
No. XVI. Field Ambulance.

At Sewell also I was greatly struck by the excellent material of which the cavalry in the west appears to be composed. Officers, men and horses, all seemed peculiarly adapted to the kind of fighting to which the country lends itself.

In the manœuvre exercises there were many mistakes and shortcomings, again due to lack of training and knowledge, but the same fine spirit of earnest desire to improve themselves was as manifest here as elsewhere.

The smart and efficient laying out of the camp lines was very remarkable in troops which had been together for so short a time.

Although the horses had been doing hard work in very hot weather for several days previously, they showed no sign of it, but looked hard and fit and thoroughly well cared for.

For reasons which I have stated above I am of opinion that the training of the cavalry in Canada is not long enough, but should be extended, like that of the artillery, to 16 days.

On July 1 I inspected the 79th Highlanders and the 90th Rifles at Winnipeg. They are a fine, well set up body of men, and their parade movements were very well carried out. I had no opportunity of testing their field training and efficiency.

Nearly all mounted regiments which I saw in the west came to camp very weak and in no case approaching their establishment. I am told that the reason for this is the paucity of horses, and that whilst heavy farm horses and other kinds of horses are bred in abundance the cavalry horse is getting scarce.

The defence of a country like western Canada so largely depends upon an adequate supply of horses suitable for cavalry and mounted riflemen that I would call particular attention to the question of horse supply.

I have had no time to go at any length into the subject and am, therefore, unable to make any definite proposal or recommendation, but it seems to me that the country lends itself in a peculiarly favourable manner to horse breeding generally, and that if some form of government encouragement and assistance were given to breeders a great industry might arise which would prove of great benefit, not only to western Canada, but to the Empire at large.

A training ground similar to that at Petawawa is badly needed in the west.

When at Sewell I was shown a large extent of suitable country, which it appears can be obtained without great trouble or expense.

I venture also to put forward this question as one of great importance to the efficiency of the troops in the west.

What I have remarked generally, under the various headings, as to the state and condition of the troops in eastern Canada, applies in a great measure to the west also.



## PART III—SUMMARY.

I have endeavoured in this report to emphasize the necessity for a sound peace organization and a thoroughly well established staff system in order to ensure that immediate mobilization and prompt movement which alone can secure to Canada the initiative in a serious war.

It is upon their ability to do this effectively that a real and reliable estimate of the value of the Canadian Forces can be formed.

I am not called upon to express opinions on the subject of universal service, nor do I wish to do so, but I am not prepared, at present, to say that the volunteer system is inadequate to the requirements of the Dominion, because that system has not yet, in my opinion, had a fair trial.

It cannot be judged upon its merits until it is seen what results will accrue when the rules and regulations which are framed to give effect to it are strictly enforced.

An army which is maintained on a volunteer basis has certain decided advantages, and it is probably more suitable to a country like Canada than any other, if it can be made so efficient as to guarantee reasonable security.

But sound organization, good staff work and competent commanders are the first essentials for its success, and there must be the closest adherence to Regulations laid down.

The full measure of service and obligation which a volunteer, whether officer or private, takes upon himself must be exacted.

In a force raised and maintained on a volunteer system, nothing less than this will do, and anything less will mean inefficiency, failure, and, at last, disaster.

According to my judgment, these important requirements are not fulfilled.

I may summarize the principal shortcomings as lying in an insufficiently developed organization; inadequate knowledge in the higher command; in the test qualifications for officers and non-commissioned officers of the Active Militia laid down in Regulations, not being strictly enforced; and in the rank and file not being compelled to fulfil their engagements.

Only when the regulations which govern the constitution and maintenance of the Canadian Militia are strictly enforced will it be possible to say whether the present system meets the defensive requirements of the country or not.

Judging from what I have seen of the excellent material and the fine spirit which is apparent in all ranks, and taking also into consideration the marked progress which has been made within the past few years, and the evident signs of its continuance, I should be inclined to think that, so long as the present condition of affairs on the North American Continent remains as it is, the existing system, if strictly administered on a sound basis of peace organization, should suffice to meet the needs of the Dominion.

We live, however, in times of great change and progress, and it behoves the intelligence department to keep a sharp eye upon the course of events so that the government may be kept *au courant* with any military changes in other countries which necessitate consideration of a more drastic military system on the part of Canada.

I may mention that, in the course of my tour of inspection, I have seen several bodies of cadets.



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The movement seems to be making good progress throughout the Dominion, and I have been much struck by the fine physique and training of the boys and their smart and soldierlike bearing on parade.

I think much credit is due to those distinguished members of the scholastic and ecclesiastical professions who have done so much to foster this movement, which I regard of very great promise for the future of the Canadian Forces.

I cannot close this report without expressing my deep appreciation of the help rendered to me throughout the whole of my tour of inspection by Major General Sir Percy Lake, Inspector General of the Canadian Forces, Colonel F. L. Lessard, Adjutant General, and the other members of the Canadian Staff who have accompanied me throughout.

I must also express my warmest thanks for the kindness and cordiality with which I have everywhere been received.

I have been thrown so much during my service with the Canadian Forces in the Field, and I have learned to regard them with such admiration and esteem, that it has given me the deepest pleasure and satisfaction to renew my acquaintance with them.

I have the honour to be, sir,

Your obedient servant,

J. D. P. FRENCH, *General*,

*Inspector General of the Imperial Forces.*



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## APPENDIX 'A.'

Date.	Place.	Remarks.
May 20	Quebec	
" 21	"	Inspect 8th and 9th Regiments.
" 22	"	Leave for Toronto.
" 23	Toronto	Inspection Toronto Cadet Corps by Governor General.
" 24	"	Unveiling South African memorial; inspection 2nd, 10th and 48th Regiments.
" 25	"	Inspect permanent corps, Toronto.
" 26	Hamilton	Inspect 13th and 91st Regiments.
" 27	"	Leave for Montreal.
" 28	Montreal	Inspect 1st, 3rd, 5th, 65th Regiments and Cadets.
" 29	"	Leave for Quebec.
" 30	Quebec	Inspect permanent corps, forts and arsenal.
" 31	"	Leave for Kingston.
June 1 and 2	Kingston	Inspect 14th Regiment, Royal Canadian Horse Artillery and Royal Military College.
" 3	"	Leave for Ottawa.
" 4 and 5	Ottawa	Inspect the G. G. F. Guards and 43rd Regiment.
" 6	"	Leave for Halifax.
" 7 to 10	Halifax	Inspect permanent corps, fortifications, 63rd, 66th Regiments and 1st Canadian Artillery.
" 11	St. John	Leave for St. John; inspect 62nd Regiment and 3rd Canadian Artillery.
" 12	"	Leave for Niagara.
" 15 to 17	Niagara	Inspect troops in camp.
" 18	Kingston	Inspect troops in camp.
" 19 and 20	Petawawa	Inspect troops in camp.
" 23 to 25	Calgary	Inspect troops in camp.
" 25	Laggan	
" 26	Banff	
" 27 and 28	Regina	Inspect Royal Northwest Mounted Police.
" 29	Sewell	Inspect troops in camp.
" 29 to July 2	Winnipeg	Inspect 79th and 90th Regiments.
July 4	Ottawa	Hand in report to the Hon. the Minister.



## APPENDIX B.

*(Not printed.)*

## APPENDIX C.

Suggested organization in one Cavalry Division, Five Divisions, Two Field Forces and Garrisons.

Based on present establishment and distribution of Canadian Active Militia.

## CAVALRY DIVISION.

(Organized only on mobilization, does not exist as such in peace.)

## 1st Cavalry Brigade—

The G. G. Body Guard.

9th Mississauga Horse.

25th Dragoons.

9th Battery, Canadian Field Artillery.

1st Field Troop Engineers (non-existent yet).

Cavalry Brigade T. and S. Column (No. 12 Co. C.A.S.C.).

13th Cavalry Brigade Field Ambulance.

## 2nd Cavalry Brigade—

3rd Dragoons.

5th Dragoon Guards.

'A' Battery, Royal Canadian Horse Artillery.

Field Troop Engineers (non-existent yet).

Cavalry Brigade T. and S. Column.

3rd Cavalry Brigade Field Ambulance.

## 3rd Cavalry Brigade—

6th Hussars

7th Hussars.

11th Hussars.

'B' Battery, Royal Canadian Horse Artillery.

Field Troop Engineers (non-existent yet).

Cavalry Brigade T. and S. Column (No. 13 Co. C.A.S.C.).

6th Cavalry Brigade Field Ambulance (when raised).

## 5th Cavalry Brigade—

10th Hussars.

13th Dragoons.

26th Dragoons.

Battery, Horse Artillery.

Field Troop Engineers (non-existent yet).

Cavalry Brigade T. and S. Column (No. 10 Co. C.A.S.C.).

Cavalry Brigade Field Ambulance.



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## FIRST DIVISION.

## Cavalry—

24th Grey's Horse.

## Artillery—

Brigade, C.F.A.

Brigade, C.F.A.

Brigade, C.F.A.

1st Brigade, C.F.A. (Howitzer), (Guelph).

Heavy Battery (No. 3 Co. R.C.G.A., Quebec).

## Engineers—

Field Company.

Field Company.

Telegraph Detachment.

## Infantry—

1st Brigade (London, 22nd, 26th, 27th, 28th).

2nd Brigade (Guelph, 29th, 30th, 32nd, 33rd).

4th Brigade (Toronto, 23rd, 31st, 35th, 97th).

## Army Service Corps—

T. &amp; S. Column (No. 1 Co. C.A.S.C., Guelph).

T. &amp; S. Column.

T. &amp; S. Column.

T. &amp; S. Column.

## Medical Corps—

No. XIV. Field Ambulance (Sarnia).

No. XV. Field Ambulance (London).

Field Ambulance.

## ARMY TROOPS (ATTACHED).

*Mobile Column.*

1st Hussars.

6th Battery, C.F.A.

19th Infantry Brigade (London, 7th, 21st, 24th, 25th).

No. XIX. Field Ambulance (Hamilton).

## SECOND DIVISION.

## Cavalry—

17th Hussars (Montreal).

## Artillery—

6th Brigade, C.F.A. (Montreal).

7th Brigade, C.F.A. (Sherbrooke).

5th Brigade, C.F.A. (Quebec).

Brigade, C.F.A. (Howitzer).

2nd Battery Heavy Brigade (Montreal).

## Engineers—

4th Field Company (Montreal).

Field Company.

Telegraph Detachment.

## Infantry—

9th Brigade (Montreal, 11th, 64th, 80th, 83rd, 85th).

18th Brigade (Montreal, 1st, 3rd, 5th (2), 65th).

10th Brigade (Quebec, 4th, 17th, 18th, 55th).



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## Army Service Corps—

T. & S. Column (No. 4 Co. C.A.S.C., Montreal).  
 T. & S. Column (No. 6 Co. C.A.S.C., Sherbrooke).

T. & S. Column.

T. & S. Column.

## Medical Corps—

No. IV. Field Ambulance (Montreal).

No. V. Field Ambulance (Montreal).

No. XX. Field Ambulance (Montreal).

## ARMY TROOPS (ATTACHED).

3rd Cavalry Brigade.

5th Cavalry Brigade.

11th Infantry Brigade (Quebec, 61st, 87th, 89th, 92nd).

20th Infantry Brigade (Quebec, 8th, 9th, 53rd, 84th, 86th).

No. VI. Field Ambulance (Quebec).

## THIRD DIVISION.

## Cavalry—

14th Hussars (2 squadrons).

Prince Edward Island Light Horse (1 squadron).

## Artillery—

3rd Brigade, C.F.A. (Sydney).

4th Brigade, C.F.A. (Woodstock) (less 1 battery).

Brigade, C.F.A.

Brigade, C.F.A. (Howitzer).

No. 1 Heavy Battery (3rd Heavy Brigade, St. John, N.B.).

## Engineers—

1st Field Company (Woodstock).

Field Company.

Telegraph Detachment.

## Infantry—

12th Brigade (St. John, 73rd, 74th, 82nd).

14th Brigade (Halifax, 68th, 69th, 78th, 93rd, 94th, with 76th Regt. to make two brigades).

Brigade.

## Army Service Corps—

T. & S. Column (No. 7 Co. C.A.S.C., St. John, N.B.).

T. & S. Column (No. 8 Co. C.A.S.C., Kentville, N.S.).

T. & S. Column.

T. & S. Column.

## Medical Corps—

No. VIII. Field Ambulance (St. John, N.B.).

No. IX. Field Ambulance (Charlottetown, P.E.I.)

No. 1 Field Ambulance (Halifax, N.S.).

## Mobile Columns—

## ARMY TROOPS (ATTACHED).

13th Infantry Brigade (Woodstock, 62nd, 67th, 71st).

8th Hussars (Sussex).

10th Battery, 4th Brigade, C.F.A. (Woodstock).

17th Infantry Brigade (Halifax, 63rd, 66th, 75th).

14th Hussars (2 squadrons).

Garrison artillery and engineers.



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## FOURTH DIVISION.

## Cavalry—

2nd Dragoons.

## Artillery—

2nd Brigade, C.F.A. (Hamilton).

10th Brigade, C.F.A. (Cobourg).

Brigade, C.F.A.

Brigade, C.F.A. (Howitzer).

Cobourg Heavy Battery.

## Engineers—

2nd Field Company (Toronto).

Field Company.

Telegraph Detachment.

## Infantry—

5th Brigade (Niagara Falls, 37th, 39th, 44th, 77th).

15th Brigade (Hamilton, 13th, 19th, 38th, 91st).

16th Brigade (Toronto, 2nd (2), 10th, 48th).

## Army Service Corps—

T. &amp; S. Column (Toronto, No. 2 Co. C.A.S.C.).

T. &amp; S. Column (Hamilton, No. 9 Co. C.A.S.C.).

T. &amp; S. Column.

T. &amp; S. Column.

## Medical Corps—

No. X. Field Ambulance (Toronto).

No. XI. Field Ambulance (Toronto).

No. XII. Field Ambulance (Hamilton).

## ARMY TROOPS (ATTACHED).

1st Cavalry Brigade.

3rd Infantry Brigade (12th, 20th, 34th, 36th).

## FIFTH DIVISION.

## Cavalry—

4th Hussars (Kingston).

## Artillery—

8th Brigade, C.F.A. (Ottawa).

9th Brigade, C.F.A. (Deseronto).

Brigade, C.F.A.

Brigade, C.F.A. (Howitzer).

Heavy Battery.

## Engineers—

3rd Field Company (Ottawa).

5th Field Company (Kingston).

Telegraph Detachment.

## Infantry—

6th Brigade (Clarke, 15th, 16th, 40th, 45th).

7th Brigade (Kingston, 14th, 46th, 47th, 49th, 57th).

8th Brigade (Ottawa, G.G.F.G., 41st, 42nd, 43rd, 56th, 59th).

## Army Service Corps—

T. &amp; S. Column (No. 3 Co. C.A.S.C., Kingston).

T. &amp; S. Column (No. 5 Co. C.A.S.C., Ottawa).

T. &amp; S. Column.

T. &amp; S. Column.



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## Medical Corps—

No II. Field Ambulance (Ottawa).  
 Field Ambulance.  
 Field Ambulance.

## ARMY TROOPS (ATTACHED).

2nd Cavalry Brigade.

## WANTING TO COMPLETE.

## Cavalry—

2nd Cavalry Brigade, 1 regiment.

## Artillery—

Cavalry Division, 1 Battery, Horse Artillery, for 5th Brigade.  
 1st Division, 3 Brigades, Field Artillery.  
 2nd Division, 1 Brigade, Field Artillery (Howitzer).  
 3rd Division, 2 Brigades, Field Artillery.  
     1 Brigade, Field Artillery (Howitzer).  
 4th Division, 1 Brigade, Field Artillery.  
     1 Brigade, Field Artillery (Howitzer).  
 5th Division, 1 Brigade, Field Artillery.  
     1 Brigade, Field Artillery (Howitzer).  
     1 Heavy Battery.  
 Surplus—7 Batteries, Heavy Artillery.

## Engineers—

2nd Cavalry Brigade, 1 Field Troop.  
 3rd Cavalry Brigade, 1 Field Troop.  
 5th Cavalry Brigade, 1 Field Troop.  
 1st Division, 2 Field Companies.  
     1 Telegraph Detachment.  
 2nd Division, 1 Field Company.  
     1 Telegraph Detachment.  
 3rd Division, 1 Field Company.  
     1 Telegraph Detachment.  
 4th Division, 1 Field Company.  
     1 Telegraph Detachment.

## Army Service Corps—

Required, 4 Cavalry Brigade T. & S. Columns.  
     5 Divisional T. & S. Columns.  
 Available, 12 Companies, C.A.S.C.

## Medical Corps—

Required, 4 Cavalry Field Ambulances.  
     15 Field Ambulances.  
     2 Field Ambulances for Mobile Columns.  
 Available, 3 Cavalry Field Ambulances.  
     14 Field Ambulances.



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## SUMMARY.

## WANTING TO COMPLETE.

Cavalry—

1 Regiment.

Artillery—

1 Battery, Horse Artillery.

7 Brigades, Field Artillery,

4 Brigades, Field Artillery (Howitzer).

1 Heavy Battery.

Engineers—

3 Field Troops.

5 Field Companies.

4 Telegraph Detachments.

Army Service Corps—

12 Companies.

Medical Corps—

1 Cavalry Field Ambulance.

3 Field Ambulances.

## SURPLUS.

Artillery—

7 Heavy Batteries.

In certain provinces there is a surplus of infantry, but in others there are deficiencies to be made up. Speaking generally the infantry is slightly in excess of requirements for this establishment.



## APPENDIX D.

## HORSES REQUIRED FOR CANADIAN MILITIA.

## PEACE ESTABLISHMENTS.

Branch of Service.	No. of Horses.
Cavalry.. . . .	7,636
Field Artillery.. . . .	1,992
Garrison Artillery.. . . .	1,414
Engineers.. . . .	244
Corps of Guides.. . . .	200
Infantry.. . . .	509
Army Service Corps.. . . .	1,259
Army Medical Corps.. . . .	658
	<hr/>
	13,912

## WAR ESTABLISHMENT OF EXISTING AUTHORIZED UNITS.

Cavalry.. . . .	14,336
Artillery.. . . .	7,259
Engineers.. . . .	598
Corps of Guides.. . . .	400
Infantry.. . . .	5,664
Army Service Corps.. . . .	1,050
Army Medical Corps.. . . .	1,364
	<hr/>
	30,671







